FIG. 1A

FIG. 1B

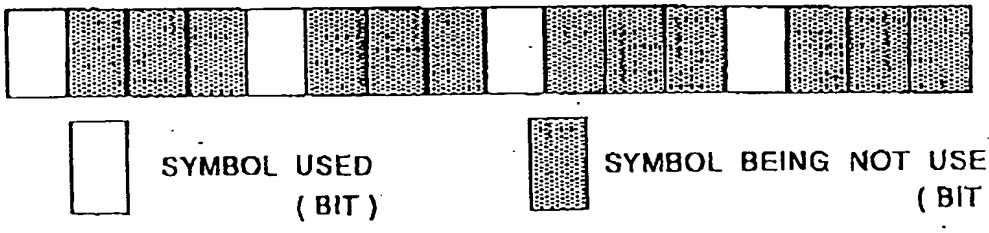


FIG. 1C

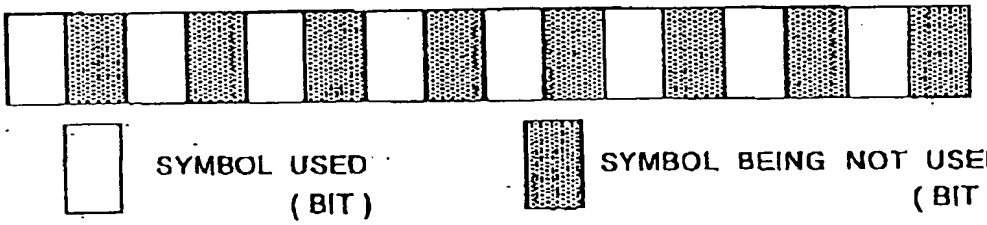


FIG. 1D

FIG. 2A

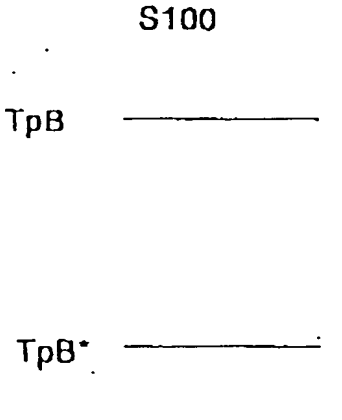


FIG. 2B

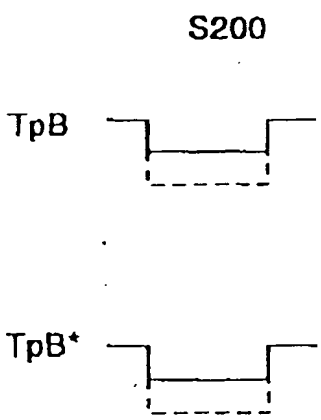


FIG. 2C

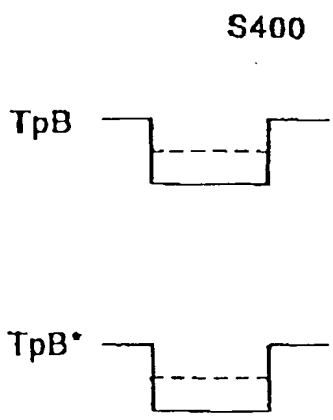
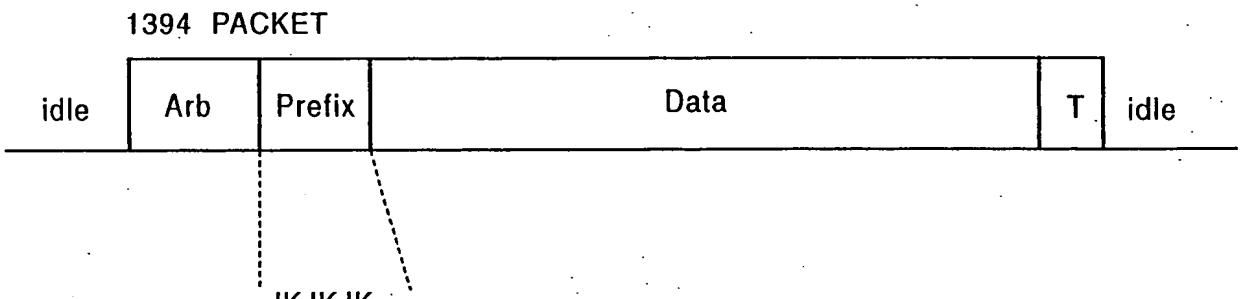


FIG. 3



	DATA RATES	DATA STREAMS
S IS NOT INSERTED	S100	JKJKJK
ONE S IS INSERTED	S200	JKSJKJK
TWO Ss ARE INSERTED	S400	JKSSJKJK
THREE Ss ARE INSERTED	S800	JKSSSJKJK

FIG. 4

SYMBOLS	5B	4B
0	1 1 1 1 0	0 0 0 0
1	0 1 0 0 1	0 0 0 1
2	1 0 1 0 0	0 0 1 0
3	1 0 1 0 1	0 0 1 1
4	0 1 0 1 0	0 1 0 0
5	0 1 0 1 1	0 1 0 1
6	0 1 1 1 0	0 1 1 0
7	0 1 1 1 1	0 1 1 1
8	1 0 0 1 0	1 0 0 0
9	1 0 0 1 1	1 0 0 1
A	1 0 1 1 0	1 0 1 0
B	1 0 1 1 1	1 0 1 1
C	1 1 0 1 0	1 1 0 0
D	1 1 0 1 1	1 1 0 1
E	1 1 1 0 0	1 1 1 0
F	1 1 1 0 1	1 1 1 1
I (IDLE)	1 1 1 1 1	1 0 1 0
H (HALT)	0 0 1 0 0	0 0 0 1
JK (STARTING DELIMITER)	1 1 0 0 0 AND 1 0 0 0 1	1 1 0 1
T (ENDING DELIMITER)	0 1 1 0 1	0 1 0 1
R (RESET)	0 0 1 1 1	0 1 1 0
S (SET)	1 1 0 0 1	0 1 1 1
Q (QUIET)	0 0 0 0 0	0 0 1 0
V (VIOLATION)	0 0 0 0 1	0 0 1 0
V	0 0 0 1 0	0 0 1 0
V	0 0 0 1 1	0 0 1 0
L (EMBEDDED DELIMITER)	0 0 1 0 1	0 0 1 0
V	0 0 1 1 0	0 0 1 0
V	0 1 0 0 0	0 0 1 0
V	0 1 1 0 0	0 0 1 0
V	1 0 0 0 0	0 0 1 0

FIG. 5A

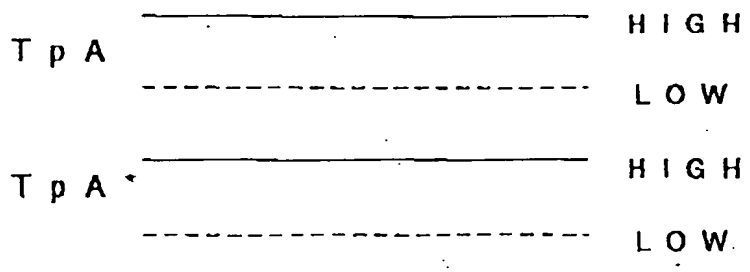

TpA
HIGH
LOW
TpA
HIGH
LOW

FIG. 5B

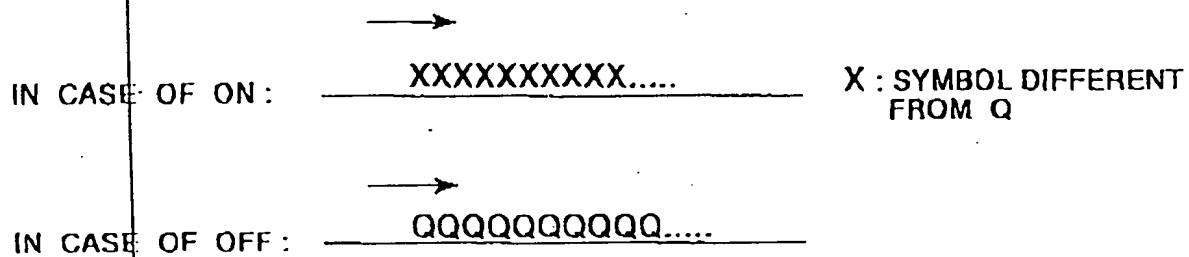

IN CASE OF ON :
XXXXXXXXXX.....
X : SYMBOL DIFFERENT FROM Q
IN CASE OF OFF :
QQQQQQQQQQ.....

FIG. 6

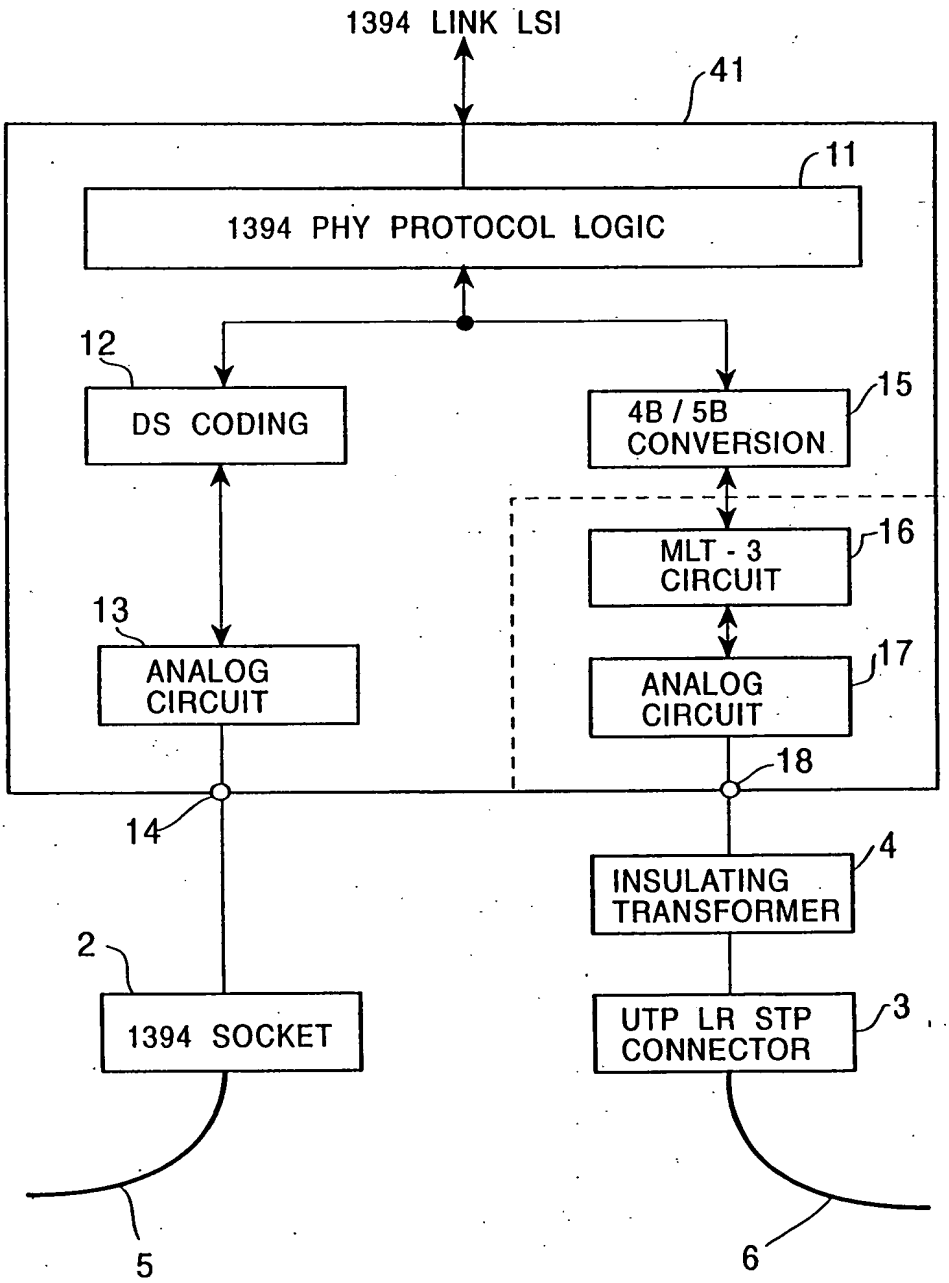

1394 LINK LSI
41
11
1394 PHY PROTOCOL LOGIC
12
DS CODING
15
4B / 5B CONVERSION
16
MLT - 3 CIRCUIT
13
ANALOG CIRCUIT
17
ANALOG CIRCUIT
18
14
4
INSULATING TRANSFORMER
2
1394 SOCKET
UTP LR STP CONNECTOR
3
5
6

FIG. 7

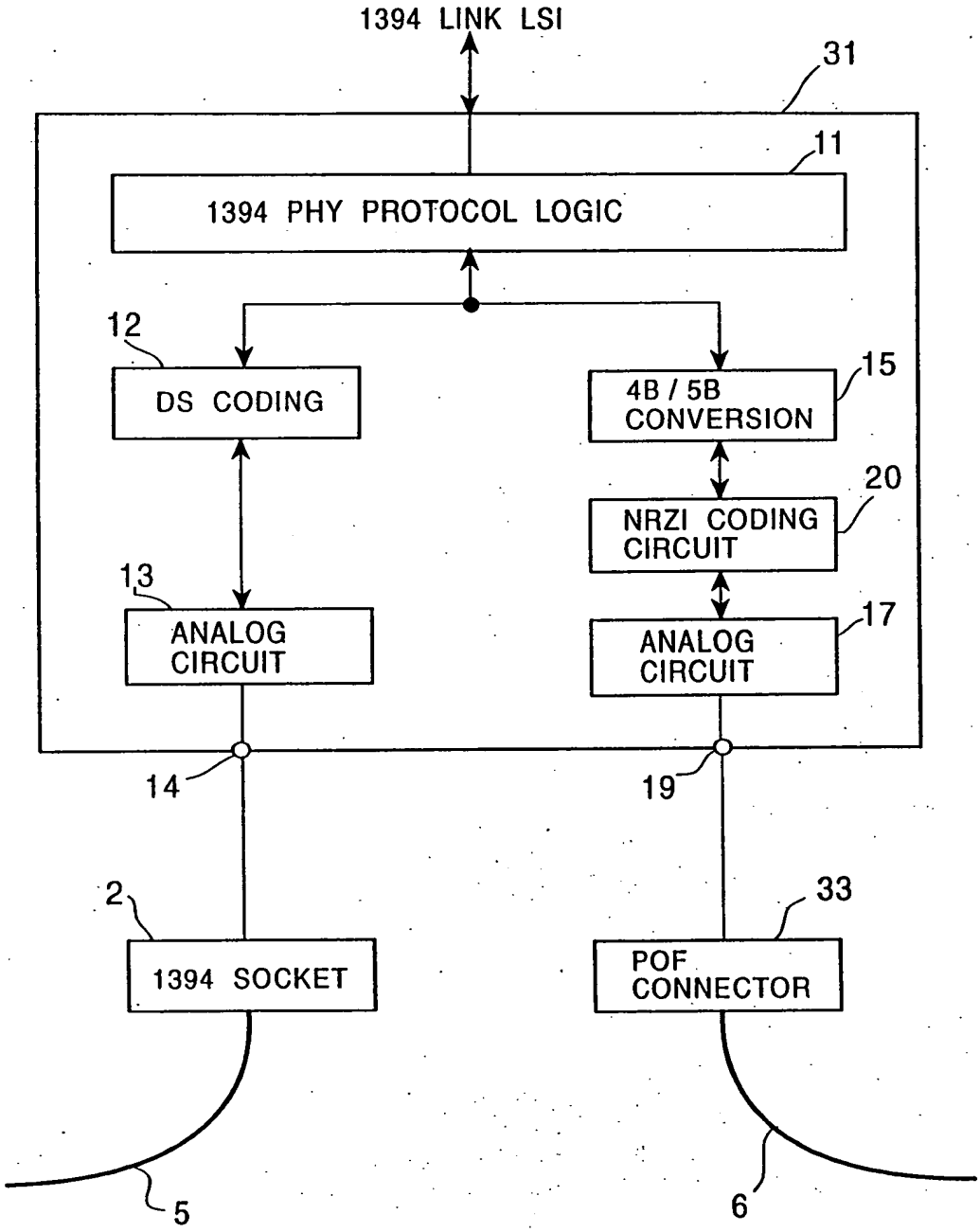
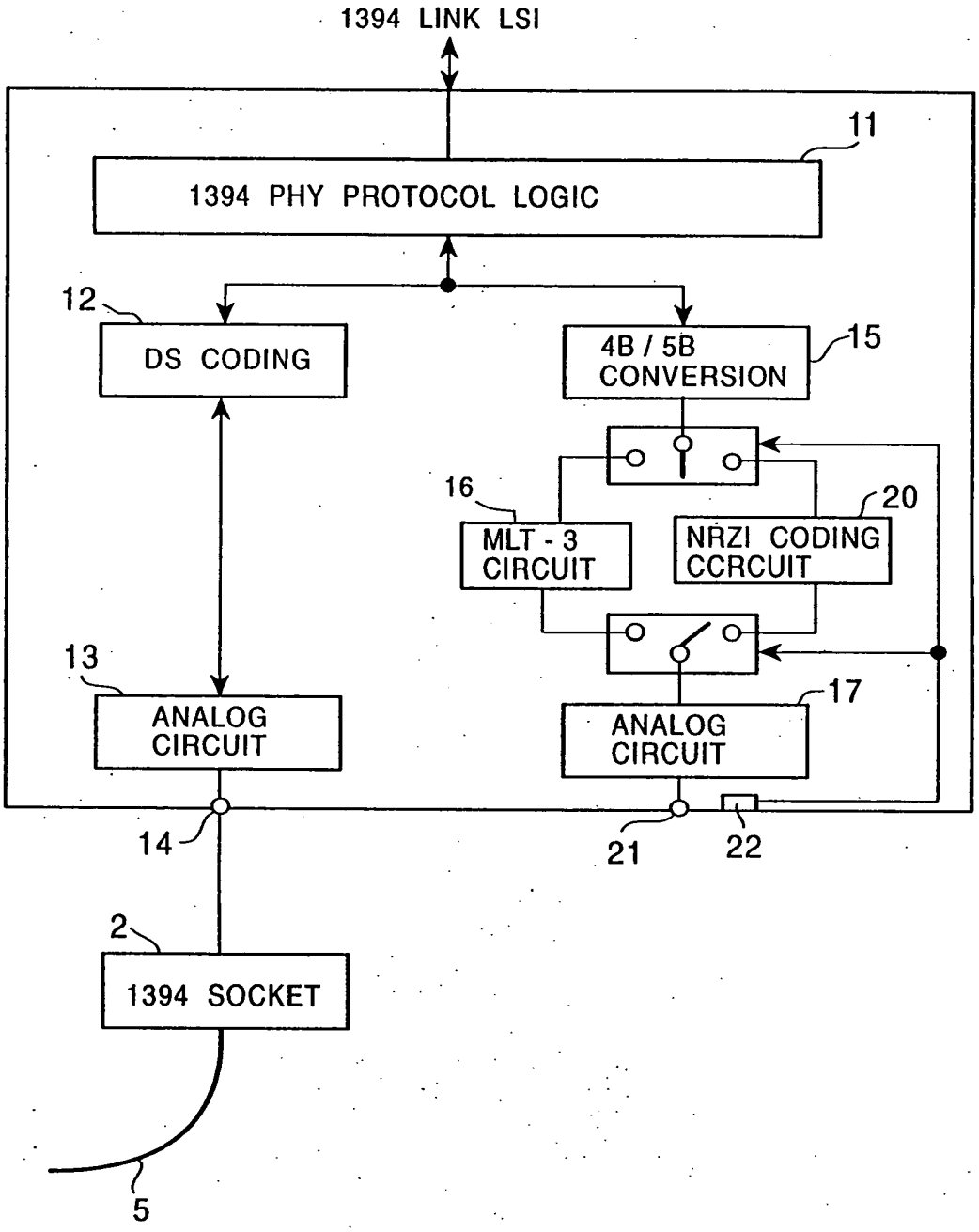

1394 LINK LSI
31
11
1394 PHY PROTOCOL LOGIC
12
DS CODING
15
4B / 5B CONVERSION
20
NRZI CODING CIRCUIT
13
ANALOG CIRCUIT
17
ANALOG CIRCUIT
14
19
2
1394 SOCKET
33
POF CONNECTOR
5
6

FIG. 8


1394 LINK LSI
11
1394 PHY PROTOCOL LOGIC
12
DS CODING
4B / 5B CONVERSION
15
16
MLT - 3 CIRCUIT
NRZI CODING CCRCUIT
20
13
ANALOG CIRCUIT
17
ANALOG CIRCUIT
14
21
22
2
1394 SOCKET
5